Michigan Department of Environmental Quality
Resource Management Division

ANNUAL REPORT ON CAPACITY DEVELOPMENT PROGRAM FISCAL YEAR 2011

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List of Acronyms

ACO	Administrative Consent Orders
Act 399	Safe Drinking Water Act, 1976 PA 399, as amended
AWWA	American Water Works Association
CCR	Consumer Confidence Report
CDP	Capacity Development Program
CWS	Community Water System
DACO	District-Initiated ACO
DDBPR	Disinfectants and Disinfection Byproducts Rule
DWRF	Drinking Water Revolving Fund
eDWR	Electronic Drinking Water Reporting
ERG	Expense Reimbursement Grant
ERP	Emergency Response Plan
ETT	Enforcement Tracking Tool
FAP	Financial Action Plan
FY	Fiscal Year
GWR	Ground Water Rule
KWA	Karegnondi Water Authority
LHD	Local Health Department
MCL	Maximum Contaminant Level
MDEQ	Michigan Department Environmental Quality
MEHA	Michigan Environmental Health Association
MGMT	Michigan Groundwater Management Tool
MOR	Monthly Operation Reports
NCWS	Noncommunity Water Systems
NTNCWS	Nontransient Noncommunity Water Systems
OTCU	Operator Training and Certification Unit
PWSID	Public Water System Identification Number
RMD	Resource Management Division
SDWA	Federal Safe Drinking Water Act
SDWIS/State	Safe Drinking Water Information System/State
SNC	Significant Noncomplier
SSI	Small Systems Initiative
SWIPP	Surface Water Intake Protection Program
TMF	Technical, Managerial, and Financial
TOC	Total Organic Carbon
USDA-RD	United States Department of Agriculture – Rural Development
USEPA	United States Environmental Protection Agency
WHPA	Wellhead Protection Area
WHPP	Wellhead Protection Program

1 Introduction

The 1996 Amendments to the federal Safe Drinking Water Act (SDWA) added provisions for each state to develop a Capacity Development Program (CDP). The objective of the CDP is to enhance public health protection by helping water systems to develop and maintain the technical, managerial, and financial (TMF) capacity they need to consistently deliver a safe, reliable, and abundant supply of drinking water to all customers.

The purpose of this document is to demonstrate to the United States Environmental Protection Agency (USEPA) that the state is implementing a capacity development strategy as required in the SDWA, Section 1420(c)(1)(C), or risk losing 20 percent of the annual Drinking Water Revolving Fund (DWRF) allotment that the state is otherwise entitled to receive under the SDWA, Section 1452.

This report corresponds to the criteria set forth in the USEPA memo "Reporting Criteria for Annual State Capacity Development Program Implementation Reports" dated June 1, 2005. The report is due to the USEPA within 90 days of the end of the reporting period. Michigan's reporting period is the state fiscal year (FY) that ends on September 30, so this report is due by December 30 of each year. Elements discussed in this report are:

- New Systems.
    - Identify legal authority.
    - Identify control points.
    - List of new systems.
- Existing Systems.
    - Identify tools and activities.
    - Identify systems.
    - Identify needs and provide assistance.
    - Review implementation and address findings.
    - Modify strategy.

2 New Systems Program

2.1 Identify Legal Authority

The legal authority remained unchanged during the reporting period. The CDP is implemented by the Michigan Department of Environmental Quality (MDEQ), Resource Management Division (RMD), through amendments to the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), by application of capacity development policies and guidance documents and through cooperation and partnerships with other agencies.

2.2 Identify Control Points

The control points remained unchanged during the reporting period. As outlined in the *New Community Water System Capacity Guideline Document*, dated May 1, 2000, new systems must demonstrate TMF capacity before serving water to the public. The new systems program relies on two control points: construction permits, which are required by law, and final inspection, which is required by policy. Generally, a construction permit is issued based on the technical capacity of the proposed system. For Community Water Systems (CWS), the financial and managerial capacity requirements may still be pending while the system is under construction. Approval to commence operation is not granted until after an acceptable final inspection and approval of a financial plan and operations plan that address financial and managerial capacity. For nontransient noncommunity water systems (NTNCWS), the RMD has delegated the authority to the local health departments (LHDs) to review, approve, and issue construction permits. When water systems begin the permit application process, the LHD helps them outline their financial and managerial capacity. Prior to receiving approval to commence operation, the NTNCWS must submit a financial plan and a managerial plan that includes a contingency plan and designation of a certified operator.

2.3 List New Systems

Lists of CWS and NTNCWS that became active during the last three FYs are in Appendix A. This report normally indicates which systems appeared on a Significant Noncomplier (SNC) list during a three-year period. However, the USEPA replaced the SNC list with the Enforcement Tracking Tool (ETT) in FY 2010. The ETT is a better mouse trap to indicate systems' noncompliance across all rules–giving higher weight to violations posing a greater public health threat. This year, the MDEQ looked at the SNC data for FY 2009 and the ETT data for FY 2010 and FY 2011. Next year only the ETT will be used.

No new systems appeared on the FY 2009 SNC list or on the ETT with a score of 11 or more. New system data is more meaningful when compared to all systems. The table shows the number and percent of new systems and all systems that appear on a noncompliance list (SNC or ETT). For this reporting period, new systems are performing better than all systems overall.

FY 2009 to FY 2011	**CWS**		**NTNCWS**	
	New	**New & Existing**	**New**	**New & Existing**
Number of systems	9	1406	42	1371
Number of systems on FY 2009 SNC list or FY 2010-FY 2011 ETT	0	18 SNC 16 ETT	0 SNC 0 ETT	27 SNC 94 ETT
Systems on an SNC list or ETT	0%	1% SNC 1% ETT	% SNC 0% ETT	2% SNC 7% ETT

3 Existing Systems Program Tools and Activities Used

The *Capacity Development Strategy for Existing Public Water Systems*, dated August 1, 2000, lists the programs, tools, and/or activities to help systems acquire and maintain capacity. This section describes each of the major program elements, the target audience, and a discussion of how each helps to achieve and enhance capacity.

3.1 Sanitary Surveys to Evaluate Systems

Target: CWS and Noncommunity Water Systems (NCWS)

Capacity of existing systems is assessed through sanitary surveys, on-site surveillance visits, and through the construction permit process.

For NCWS, sanitary surveys are conducted every 5 years. Construction permits and inspections are required when new wells are installed or treatment is added. While change in classification from transient to NTNCWS results in a capacity assessment of the existing system, these systems are not included in the list of new systems in Appendix A.

For CWS, sanitary surveys are conduced every third year by RMD field staff. This frequency coincides with the requirements of the series of Surface Water Treatment Rules and the Ground Water Rule (GWR). Sanitary surveys result in systems being rated satisfactory, marginal, or deficient. Ratings are based on compliance with health-based standards, monitoring and reporting requirements, qualified operator requirements, and requirements in Act 399 or TMF sufficiency, such as well construction, general plans, emergency response plans, or financial requirements for privately-owned systems. The RMD staff detail their findings and recommendations in a letter to the system. These letters may include a list of milestones with dates, by which the items are expected to be addressed. Options for capacity assistance may also be offered, such as recommending a financial assessment or contacting available technical assistance providers for specific assistance. These evaluation letters help systems understand the severity of the deficiencies and prioritize response activities.

The following table summarizes data on CWS sanitary surveys, visits, and construction permits in recent years. The MDEQ is pleased with the increase in visits and sanitary surveys conducted. The number of construction permit applications received continues to decline. It is expected to increase only when the state's economy gains strength.

CWS Evaluations, Visits, and Construction Permits			
	FY 2009	**FY 2010**	**FY 2011**
Number of Sanitary Surveys Conducted	448	419	519
Percent Rated Satisfactory	88	80	85
Percent Rated Marginal	10	11	9
Percent Rated Deficient	5	6	6
Percent Not Rated	0	3	0
Number of Visits	1,713	1,593	1,785
Number of Construction Permits Issued	859	759	717
Percent Issued Within 10 Business Days of Receipt *	76	76	73

* The percent completed includes water mains (which we strive to complete in 10 days) and other more complicated projects that take longer.

The frequency of surveillance visits above are as follows:

Type of CWS	Smaller/Less Complex	Larger/More Complex
Wholesale customer supplies	Once per year	Once per year
CWS with no treatment*	Once per year	Once per year
CWS with treatment*	Twice per year for systems employing treatment that is less than "complete treatment"	Four times per year for systems employing "complete treatment"

*Treatment employed for public health protection. Excludes water softeners or other point of entry aesthetic treatment.

In addition to scheduled surveillance visits and sanitary surveys, field staff visits water systems to investigate problems discovered as a result of routine monitoring or arise as a result of emergencies. If water system issues need to be elevated to local officials, the community leadership may include field staff on the agenda of council or board meetings.

3.2 One-on-One Technical Assistance and Consultation

Target: CWS and NCWS

The RMD and LHD field staff are the primary implementers of the CDP. Water system operators develop a relationship with field staff that are the primary contact for capacity development. Each CWS is served by RMD staff from 1 of the 8 district offices, and each NCWS is served by staff from 1 of the 44 LHDs under contract with the RMD. A primary objective of the RMD field staff and the LHD is to provide excellent customer service from the construction permit process for new infrastructure through the continual assessment and oversight process during operation. Field staff achieves that objective through assistance to systems during site visits, at meetings and conferences, during training events, and consultation by telephone and e-mail. Field staff attends, participates, and presents at periodic regional operator meetings to discuss upcoming regulations, regional issues, and to network with operators and managers.

The NCWS program staff of the RMD maintains communication with each of the 44 LHDs during the year. This communication occurs routinely via phone calls, e-mail, joint office and field work, and group and individual training. Also quarterly data reviews and annual evaluations of each of the 44 LHD's work are conducted to assure and maintain water system compliance. Training of LHD staff is conducted to inform, explain, and discuss new and updated program issues and procedures. Beginning in FY 2010, the NCWS program staff was working with select LHDs to investigate means to enhance training within the evaluation process (see discussion in Section 5.1). The NCWS staff also routinely presents topics at environmental health conferences.

To increase reliability, gain efficiencies, and improve water quality, field staff serves as consultants to encourage regionalization, foster consolidation, and create partnerships among water systems. For example:

- The city of Holland has started a project to include an emergency interconnect with the city of Wyoming. The interconnect is being constructed by the city of Holland, but half the costs will be recovered through a payback agreement with the city of Wyoming. Both communities are benefiting from this partnership. Holland will receive five million

gallons per day in increased capacity, and Wyoming would benefit from greater flexibility in supplying water under varying conditions.

- The city of St. Louis is anticipating applying for future United States Department of Agriculture – Rural Development (USDA-RD) funding to complete a regionalization project. This project is expected to include new wells to augment the capacity of the city of Alma water treatment plant and two interconnections from the city of Alma to the city of St. Louis. Currently, the two communities are working to form a regional water authority.

- The city of Flint and Genesee County have continued to move forward in their search for an alternative source rather than relying solely on purchased water from Detroit, as mentioned in last year's edition of this report. Together with a few Lapeer County communities, they have created the Karegnondi Water Authority (KWA) to collaborate on their effort. The RMD field staff will meet with the KWA and their consultants in January 2012 to discuss the specific communities involved, funding, project timeline, and the review and issuance of construction permits.

Countless other instances of one-on-one technical assistance help water systems gain TMF capacity.

3.3 Other Public Water System Program Efforts

The RMD has submitted a proposal to the USEPA, Region 5, to modify Stage 2 monitoring in combined distribution systems to achieve the public health protection intended by the rule while minimizing the monitoring costs for the water systems. When approved, the RMD intends to conduct training sessions across the state where the greatest numbers of consecutive systems are located. The purpose is to reiterate a system's obligations and to update each system's monitoring plan. During the year, the RMD central staff drafted a monitoring plan template to consolidate the Stage 1 monitoring plan and the Standard Monitoring Plan for each supply. For many consecutive systems, Stage 2 monitoring will be the first monitoring the systems have had to conduct. The upcoming training sessions will serve as a reminder for water systems to conduct this monitoring and the newly developed monitoring plan will serve as the training tool.

Other tools to help systems comply with monitoring and reporting requirements include:

- Individual monitoring schedules for each CWS and NCWS. These schedules are based on each system's applicable monitoring waivers and schedule in the standard monitoring framework. To supplement the schedule, staff may enclose or provide an Internet link to the following, depending on that year's monitoring requirements:

    - Lead and Copper Report and Consumer Notice of Lead Result Certificate. This form provides a fill-in-the-blank version of the consumer notice for the convenience of systems with limited computer ability.

    - Drinking Water Lead & Copper Sampling Instructions. The system may provide this document to the occupants that will be performing the sampling.

    - Bacteriological Sample Siting Plan. This form incorporates GWR triggered monitoring requirements.

- List of approved laboratories.
- Annual Pumpage/Usage Report For Community Water Supply (applicable to CWS that do not submit Monthly Operation Reports [MOR] with monthly pumpage).
- Cross Connection Report. Systems use this form to demonstrate ongoing implementation of their Cross Connection Control Program.
- Consumer Confidence Report Certificate of Distribution.

Venues to communicate monitoring and reporting requirements include:

- Reminder phone calls, e-mails, or post cards.
- Reminder letters. Systems that have not yet completed their annual or less frequent monitoring receive a reminder within 30 to 90 days before the deadline to prevent a violation.
- Lead and copper reminder letters. Lead and copper monitoring is so confusing that this reminder letter also serves as monitoring guidance.
- Lead and Copper 90th percentile letter or action level exceedance letter. These letters outline the results of the system's monitoring and remind systems of further requirements, such as distributing the Consumer Notice of Lead Result, for conducting water quality monitoring or installing corrosion control treatment.
- Consumer Confidence Report (CCR) reminder letter. Each spring, RMD field staff reminds systems of the annual requirement and provides the following tools to comply. A variety of templates are made available including the Internet link to the USEPA *CCRiwriter*, as well as the guidance documents *Preparing Your CCR* and *Reporting TOC on the CCR*, as applicable.
- The LHDs inform the NTNCWS of the administrative rule requirement to prepare a water quality report that contains a summary of compliance monitoring data for NTNCWS that serve K-12 schools and day care centers.
- Violation letters, discussed in Section 3.4 below, include requirements to post public notice, when applicable. Templates for typical monitoring and reporting violations, and many state drinking water violations, are available to field staff. Staff either provides the template for the system to edit and place on its own letterhead, or staff may prepare the final public notice for the system to distribute.

Tools to help systems manage the operational requirements include:

- MOR requirement. Staff reviews each MOR to assure compliance with treatment techniques and to evaluate treatment processes for optimal operating practices.
- Enhanced planning requirements: As former contingency plans become outdated, staff are helping CWS to transition to the Emergency Response Plan (ERP) using a template. (See Section 5.2.1)

- Privately-owned CWS requirements. While it is clear in the administrative rules that new systems must demonstrate technical, managerial, and financial capacity before commencing operation, the 2009 amendments to Act 399 clarified that these requirements also apply to new owners of existing systems. The Stipulation to Conditions that owners must sign covers the minimum elements to ensure owners are able to provide an adequate supply of drinking water.

- Water well site inspections and approvals. The LHD and RMD field staff conduct inspections and approvals of water wells serving the NCWS and CWS, respectively.

- Guidance documents: The RMD staff develops and distributes guidance documents as needed:

    - *Water Well Disinfection Manual*.

    - *Suggested Practices* outlines design, construction, and operation criteria for CWSs.

    - The *Cross Connection Rules Manual* outlines program requirements.

    - *New Community Water System Capacity Guideline Document* developed in 2000 guides field staff and owners of proposed or new systems through the process. It includes a capacity assessment checklist, a financial workbook, policies related to new systems, and templates and forms for planning purposes.

    - Source water protection guidance documents are available for systems pursuing these efforts.

    - NCWS program guidance documents include the *Noncommunity Staff Reference Manual,* the *WaterTrack Operators Manual* for LHD staff, and the study guide *Level 5 Drinking Water Operators Guide* for those individuals pursuing certification to operate a NCWS.

- USEPA tools. In addition to state-developed products, the field staff distributes, as needed, USEPA tools and guidance documents, promotes the Check Up Program for Small Systems and other system capacity development and sustainability tools, and promotes USEPA Webinars.

Field staff hosts and presents material at meetings, conferences, and training sessions throughout the year for water system personnel, consulting engineers, and local decision makers. Ongoing activities include serving as instructors at several operator training courses throughout the year, speaking at other meetings and conferences related to drinking water, and attending USEPA sponsored Web casts. Specific activities in FY 2011 include:

- The RMD field staff presented the *MDEQ Update* at each of eight Michigan Section, American Water Works Association (AWWA), regional meetings updating participants on new rule implementation. New rules updates and training was also presented at RMD drinking water program meetings, usually held quarterly.

- The MDEQ cosponsors a quarterly newsletter, *Water Works News*, with the Michigan Section, AWWA. The newsletter is distributed to members and all CWS, including

approximately 700 privately-owned CWS that might not otherwise receive drinking water-related information. The MDEQ share of the distribution cost is funded by the capacity development set-aside of the DWRF through a Joint Funding Agreement with the Michigan Section, AWWA.

- The NCWS program staff occasionally participates in association conferences relevant to NCWS systems, such as the Michigan Manufactured Housing Recreational Vehicle & Campground Association, the Michigan School Business Officials, the Michigan Ground Water Association, and the annual Groundwater Conference sponsored by the Michigan Environmental Health Association (MEHA).

- The RMD program staff worked with the Michigan Department of Community Health, Oral Health Program, to implement a Fluoride Grant Program to promote public water system fluoridation by offering grants to water systems wishing to purchase new or replacement fluoride feed equipment. Six water systems were awarded grants in FY 2011.

- To continue to offer quality training to RMD staff and water systems, the RMD takes advantage of USEPA and AWWA Webinars. Certified operators can meet continuing education requirements with USEPA or AWWA sponsored Web casts. The RMD promotes Webinars and encourages field staff to forward information to water systems so they can participate at their site. The RMD will continue to take advantage of other opportunities to interact with water systems and their consulting engineers, municipal leaders, and others interested in drinking water issues.

3.4 Enforcement

Target: CWS and NCWS

Evaluations and compliance information become the basis for enforcement.

In an FY 2009 effort to gain consistency across districts, templates were developed for violation letters and further refined in FY 2010. When a system violates a requirement, they should receive a letter that clearly states what was violated, when the violation occurred, how to return to compliance, and when to respond. It is believed that enforcement will be viewed as more predictable; therefore, systems will make a greater effort to comply to avoid enforcement.

When systems fail to return to compliance, escalated enforcement, including administrative consent orders (ACOs) and unilateral department orders (MDEQ order), can be initiated. Before escalated enforcement is used, many systems return to compliance when they are assessed administrative fines for monitoring and reporting requirements. Water systems generally return to and remain in compliance with monitoring and reporting requirements after receiving a fine. During FY 2009 to 2011, 51 different CWS received a fine at least one time for at least one monitoring violation. Small systems represent all but five of the systems that received fines, which is expected as large systems typically have the resources and systems in place to ensure monitoring is timely and performed correctly.

When a fine is not applicable or does not prevent further violations, the RMD moves into an escalating series of enforcement actions that include a district-initiated ACO (DACO), traditional ACO, and in rare cases, an MDEQ Order. However, field staff prefers technical assistance over

enforcement to bring systems back into compliance. There were no ACOs entered or MDEQ Orders issued during 2011. There were five DACO's entered in 2011.

To streamline enforcement, the DACO may be used under certain circumstances instead of the traditional ACO. This process bypasses enforcement staff involvement; the RMD field staff drafts the DACO using templates and calculates penalties based on enforcement staff guidance. In July 2011, Lakeside Estates entered into a DACO with the RMD, as they did not have the minimum number of water wells with separate pumping units as required. The DACO required the owner of the system to purchase potable water from a regional system or construct a second water well within 6 months. Lakeside Estates is currently meeting the compliance schedule, and field staff expects all required actions to be completed.

Some water systems are not willing to enter into an DACO or an ACO. In those cases, the RMD must escalate the enforcement level to an MDEQ Order. Recently, Heritage Apartments in Oakland County has been referred to our enforcement staff for an escalated enforcement. This water supply system has been rated deficient for failure to meet firm capacity requirements with a second water well, has had numerous monitoring violations, was issued a Significant Deficiency Violation Notice, and has refused to enter into an DACO. Heritage Apartments was referred to the Michigan Department of Attorney General in June 2011 and was issued an MDEQ Order in November 2011. Compliance with the MDEQ Order is being monitored.

Each LHD is required to conduct enforcement necessary to address NCWS in noncompliance. The RMD field staff assists the LHD upon request, and in extreme cases, the RMD central staff may take the enforcement lead or refer it to the USEPA, Region 5, when state resources are unavailable. Typical tools used by the LHD include administrative fines, informal hearing, local license suspension procedures, and bilateral compliance agreements (similar to the DACO for CWS).

3.5 Operator Training and Certification

Target: CWS and NCWS

Due to amendments to Act 399, a properly certified operator must be available at each of the 1,406 CWS and 1,371 NTNCWS, and at the 66 transient NCWS that employ treatment for public health purposes. Operators maintain their certification by meeting continuing education requirements through training offered in a variety of venues.

3.5.1 Operator Training and Certification Unit (OTCU)

The RMD, OTCU, provides over 30 training courses each year and certifies nearly 80 organizations and training providers that offer other opportunities for continuing education, including online courses. The OTCU has also approved a list of hands-on training or "HOT" programs that can provide operators with at least 50 percent practical experience in a three-or-more-hour training session.

The OTCU also administers the Expense Reimbursement Grant (ERG) Program for operators employed by systems serving fewer than 3,300 people, to cover approved training registration fees up to $300 per individual. For more information, see the *2011 Operator Certification and ERG Annual Report*, dated September 19, 2011, submitted to the USEPA.

Many of the training courses coordinated by the OTCU are taught by RMD field staff under a Joint Funding Agreement between the MDEQ and the Michigan Section, AWWA. The RMD treatment specialist schedules instructors and also instructs both the Basic and Advanced Cross Connection Control seminars and the Water Treatment and Distribution System 2.5-day Short Courses.

During on-site visits or other consultation opportunities, field staff discuss the certification status of the operator and may suggest training sessions to hone skills or prepare for the examination required to obtain or to upgrade certification.

3.5.2 Small CWS and NCWS Training

Under contract with the RMD, 16 LHDs provide continuing education for the level 5 operators. The intent is to provide regional training for NCWS, but any operator employed by a CWS with no treatment and a limited distribution system may attend. As stated in the *2011 Operator Certification and ERG Annual Report*, 148 operators earned continuing education credits and another 104 attended to prepare to write their level 5 exam.

Staff of the NCWS Program conducted train-the-trainer sessions for LHD staff. Topics range from current requirements and practices to discussions of new requirements and regulations. Surveillance visits and sanitary surveys are additional opportunities for the LHD staff to provide training for NCWS operators.

For the past several years, RMD staff has conducted training specifically for small CWS. General topics covered new regulatory requirements, monitoring and reporting, communicating with the public, and operational issues. Special topics change each year to keep the participants interested. The special topic in the 2011 training was “Cleaning Small Diameter Water Mains.” A total of 148 persons attended at one of four locations around the state.

3.6 DWRF

Target: CWS and Nonprofit NCWS

The 1996 Amendments to the SDWA authorized the creation of a revolving fund to provide low-interest loans for repairs or enhancements to help water systems comply with the SDWA. The capacity development provisions of the SDWA are funded through the DWRF allotment.

Michigan's DWRF is coadministered by the MDEQ and the Michigan Finance Authority. The MDEQ handles all programmatic issues, while the Finance Authority serves the DWRF Program with its financial expertise. Prior to the creation of the DWRF, project financing for CWS was left largely to the local unit of government or to individuals investing in their own systems.

In FY 2011, $41 million in low-interest loans was committed for 15 projects bringing the total since the fund's inception in 1998 to $692 million for 238 projects. Some systems receive commitments from the DWRF but may not be ready to proceed with the project until they are able to assure the revenues will be generated to repay the loan. In these cases, the system remains on the priority list for the next year. Of the projects committed, 188 have been completed for a total cost of $471 million, and the loan payments are revolving back into the fund.

Commitments in FY 2011 include projects to increase systems' capacity to reliably provide an adequate supply of water. Many of the projects involve replacing aging distribution infrastructure, others to provide redundancy, and still others to meet drinking water standards. Plainfield Charter Township, in Kent County, is the year's largest project of $7.75 million. The Township will construct a 2-million-gallon reservoir at the water treatment plant, a 20-inch ductile water main crossing the Grand River, install a pressure reducing control valve, and replace water mains at various locations. The city of Holland, in Ottawa County, will construct a 36-inch emergency transmission line from the city of Wyoming's water treatment plant. This also serves as a secondary goal of a supplemental water source to provide Holland with an additional 5 million gallons per day. Other projects improvements include a new transfer pump at the treatment plant and a new generator to provide additional capacity for treatment plant control components. This project also exceeded $7 million in water system improvements.

Michigan's drinking water program relies heavily on proper water system design and construction to prevent jeopardizing the safety of both the source and finished water. To that end, priority of DWRF projects favors those communities that are participating in a Source Water Protection Program.

3.7 Source Water Protection

Systems are continuing to take steps to protect their drinking water sources.

3.7.1 Groundwater Source Protection

Target: Municipal CWS and Not-for-Profit NCWS

Minimum isolation areas around drinking water wells are established in Part 127, of the Public Health Code, Water Supply and Sewer Systems, 1978 PA 368, as amended, and in Act 399. Programs in the MDEQ, such as the Groundwater Discharge Permit Program and the On-Site Waste Water Program, reference these isolation distances as they review applications for discharge permits or site approvals to assure the facility or activity will be protective of the drinking water source. Act 399 requires the isolation area around a proposed water well site be owned or controlled by the CWS or the NCWS.

To expand beyond this long-standing but minimal concept of source water protection, RMD staff are actively encouraging municipalities to conduct Wellhead Protection Program (WHPP) activities. Municipalities are encouraged to apply for a WHPP grant using a 50 percent local match to fund activities involved in protecting their public water supply well capture zones (based on a ten-year time-of-travel). Of the 435 municipal systems in Michigan using groundwater as a source of drinking water, 285 are involved in some aspect of wellhead protection, such as performing a delineation, inventorying the potential sources of contamination, and planning for emergencies. Of those 285 systems, 225 have completed all the steps and have an approved WHPP. As a result, 87.6 percent of the population of the state served by municipal systems using groundwater is in communities taking action to protect their groundwater sources or purchase water from communities involved in protecting their sources. The WHPP grants for FY 2011 awarded $297,600 to 27 communities as compared to the WHPP grant cycle for FY 2010 that awarded $642,900 to 43 communities. Lyon Township was the only new grantee for FY 2011.

The MDEQ, Drinking Water and Environmental Health Section, through a contract with Michigan State University's Department of Civil and Environmental Engineering, developed the Michigan Groundwater Management Tool (MGMT), formally known as Michigan Interactive Groundwater for Wellhead Protection. The MGMT can scientifically map wellhead protection areas for public water supply wells using information from existing statewide databases such as Wellogic, Map Image Viewer, and the Groundwater Inventory Mapping project. The Wellhead Protection Area (WHPA) is the surface and subsurface area contributing groundwater to the well. Michigan's WHPP defines the WHPA with a 10-year time-of-travel. This provides a reasonable length of time to respond to environmental problems within the WHPA while providing an area that can be reasonably managed. The MGMT has developed surprisingly accurate predictions of spatially-detailed and representative groundwater flow patterns and WHPAs. Most of these MGMT delineations closely parallel traditionally developed WHPA's, which cost an average $36,000.

To promote the benefit of MGMT, the MDEQ and Michigan State University recently hosted a free one-day training session for CWS, NTNCWS, LHD, and MDEQ staff. Water supply representatives in attendance were given their water system water well and pump records, source water assessment information, and WHPA maps. Further information was provided specific to their water supply and how groundwater quality can be protected. The RMD, Drinking Water and Environmental Health Section, is in the process of redefining "Substantial Implementation," allowing smaller systems to obtain this source water protection status, while increasing Michigan's population that is protected by these implemented activities. A second workshop was held in Greenville, Michigan, in December, with more workshops planned in 2012.

3.7.2 Tools as a Result of Water Withdrawal Legislation

Target: CWS, NCWS, and Other Interested Parties

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, was amended in 2006 and further amended in 2008 in response to increased water use demands, pressure to divert water outside the Great Lakes Basin, and an increase in groundwater use conflicts. The legislative amendments were intended to enhance the state's ability to manage the water resources of Michigan.

Since 2006, any proposed new or increased large quantity withdrawal, defined as a water withdrawal of 70 gallons per minute or more, requires an environmental assessment and approval prior to making use of the water resource. In 2010, the new system capacity assessment checklist was amended to address large quantity water withdrawals and ensure authorization is obtained prior to RMD district staff issuing a permit.

3.7.3 Surface Water Source Protection

Target: CWS and NCWS Using Surface Water

The Surface Water Intake Protection Program (SWIPP) is the surface water counterpart to the WHPP. Under this program, communities develop partnerships with surrounding communities to identify and take action to protect the area around the intake. The seven communities that have completed an SWIPP serve small- to medium-sized populations; one of these, the city of Escanaba, was approved in FY 2011. Like an approved WHPP, an approved SWIPP will result in additional priority points being awarded to DWRF applicants, encouraging more CWS to

develop one. A matching grant program, equivalent to that used in the WHPP, was incorporated into the administrative rules in 2009. Budget cuts have prevented the MDEQ from awarding SWIPP grants.

Monitoring can alert utility personnel of changes in water quality in time to respond quickly. To achieve this in the connecting channels between Lakes Huron and Erie, the RMD worked with federal and local governmental agencies to install a continuous, real-time water quality monitoring network in the St. Clair River, Lake St. Clair, and Detroit River. Thirteen drinking water treatment facilities equipped with a range of analytical devices have continued to operate in FY 2011. The monitoring system includes data transmission, data visualization, automated notification/alarm service, data archiving, and a publicly accessible Web site for data retrieval. In addition, rapid toxicity test equipment is being used to monitor water distribution systems in Southeast Michigan served by these surface water intakes. Nearly instantaneous communication is key to protecting surface water intakes in the Lake Huron to Lake Erie corridor because of the rapid rate of flow, periodic chemical spills, and corresponding changes in water quality. The city of Monroe, in Monroe County, is the last plant located on the connecting channels and received the monitoring equipment in FY 2011.

3.8 Financial Assessments

Target: CWSs Serving Fewer Than 10,000 People That are Either Municipally Owned or Subject to Association Bylaws

To help existing CWS improve financial capacity, the RMD conducts financial assessments of systems that serve a population of less than 10,000 and could benefit from a financial assessment. As a result, systems that are concerned about future challenges, such as complying with new rules, are making progress toward that end by improving their financial capacity. Funding for these assessments is from the technical assistance to small systems set-aside of the DWRF. Systems serving more than 10,000 people may also participate in the program, but the funding would be drawn from the capacity development set-aside.

A financial expert in the DWRF Program conducts the assessment of the community's existing financial health and develops a Financial Action Plan (FAP). The assessment is a review of financial and legal documents and an on-site meeting with system representatives.

An FAP is a tailor-made, comprehensive plan to strengthen the system's financial situation based on the assessment. Short- and long-range goals are identified in the FAP followed by a step-by-step process to reach the goals. Information on obtaining funding is provided with the FAP. The system is expected to carry out the FAP, and the RMD is available to assist when requested. An outline of a typical assessment report is included in Appendix B.

In FY 2011, one financial assessment was completed. It was recommended that the city of Burton, in Genesee County, implement a method of budgeting to fund their capital improvements plan and develop a rate setting methodology based on fixed/variable expenses. Another recommendation was to strengthen the water use ordinance, which will help support the rate setting structure.

3.9 Security

Target: CWS and NCWS

The MDEQ, Water Security and Emergency Management Program, is responsive to the various federal programs and the needs of the public water systems. Planning, training, and coordinating are all a part of the effort to emphasize emergency management for all hazards; terrorism, and malevolent acts as well as weather-related incidents and accidents.

All-day training was held for the members of the Michigan Section, AWWA, at the 7*th Annual Water Security Summit: Water Security and Emergency Management*. Topics included United States Army portable water treatment units, tabletop exercises, the Michigan Water and Wastewater Agency Response Network, Risk Management Plans, and Security and Preparedness.

The USEPA has eliminated the Water Sector Security funding as of FY 2010. As a result, further contracting is curtailed. To help offset that loss of funds, grants were applied for in FY 2011, but did not receive funding. However, recently, the MDEQ received a multimedia State and Tribal Assistance Grant to continue water system security training.

Field staff will continue to be involved in safety and security enhancements through the construction permit process and the operation of new systems.

3.10 Electronic Reporting and Data Management

Target: CWS and NCWS

Electronic reporting and data management are tools to help the central office identify and analyze statewide trends in contaminant levels, treatment, and distribution operations, and compliance. This ability will allow the RMD to focus assistance more effectively.

3.10.1 Electronic Drinking Water Reporting (eDWR)

Target: CWS Primarily, Though Elements Designed for Laboratories That Also Serve NCWS

The RMD is working to develop electronic reporting systems to provide convenience and accuracy for data reporting. The successful implementation of the Internet-based reporting system for discharge monitoring reports prompted Michigan to expand the project to include eDWR. The eDWR System will provide for online submittal of drinking water laboratory results and treatment plant operational data. The collection of data will allow the RMD to query certain parameters to assess capacity on a systemwide and statewide basis. Although competing priorities have delayed the launch of this tool, progress is still being made toward implementation. Future plans include providing other required reports online.

3.10.2 Tracking Compliance Using Safe Drinking Water Information System/State (SDWIS/State)

Target: CWS

SDWIS/State, the federally supported database for tracking drinking water compliance activities, stores actual analytical results entered either manually or via eDWR reporting discussed above. This tool allows for more automated compliance determinations, which is particularly necessary when staff resources are stretched. In FY 2005, the CWS Program began tracking Total Coliform Rule compliance monitoring in SDWIS/State, and in FY 2010, this was expanded to include Lead and Copper Rule tracking. In addition, the CWS Program has been preparing

compliance monitoring schedules for other rules for migration from the program's legacy database to SDWIS/State. The project will take at least through FY 2012 to complete.

3.10.3 WaterTrack

Target: NCWS

The LHD staff use the WaterTrack database to track NCWS inventories, certified operator information, sanitary survey reports, capacity development, construction permits, monitoring results, monitoring violations, violations of maximum contaminant level (MCL), and NCWS compliance reports. The information is monitored by the MDEQ staff that oversees the NCWS Program. WaterTrack uses an outdated platform, is largely unsupported, and does not contain capability to track all current rule requirements. A rewrite or transfer to SDWIS/State is necessary in the very near future.

4 Identify Existing Systems in Need

The strategy used to select and prioritize systems for assistance is outlined in the *Capacity Development Strategy for Existing Public Water Systems*, dated August 1, 2000, and remains unchanged. Briefly, the RMD looks at all of the following criteria:

- Compliance information.
- Sanitary surveys and results of surveillance visits.
- Construction permit bans and correspondence from the RMD addressing potential bans.
- Operation and maintenance concerns.
- Field staff input.

The sanitary surveys and surveillance visits are ongoing, while identifying which systems may need capacity assistance.

5 Identify Capacity Development Needs and Provide Assistance

The MDEQ continues to recognize the importance of the Drinking Water Infrastructure Needs Survey to ensure that a true picture of the infrastructure needs are presented to Congress and that Michigan maintains its fair share of the annual appropriation. This year, MDEQ field staff has helped many of the 63 water systems selected to participate in the needs survey to identify all eligible needs and provide acceptable documentation.

The RMD believes the four areas identified in the 2009 and 2010 edition of this report still need work. In addition to those areas, the RMD concentrated on recurring total coliform positive events. Finally, RMD recognized the needs that exist at the national level and is participating in workgroups to tackle them.

5.1 Minimize Recurring Total Coliform Positive Events

The NCWS Program became increasingly concerned with recurring total coliform positive events and MCL violations, in spite of an excellent compliance rate among NCWS overall. The

recurring nature of these events represents a potential exposure to unsafe drinking water and a significant expense of resources. It was determined that changes are necessary to improve identification of problem systems and resolve them; in other words "find and fix" the problem once and for all. This effort requires partnering among the RMD, LHD, and water well drilling contractors.

Recommendations were to improve training for water well drillers and LHDs and to identify a means for more effective monitoring under certain circumstances.

Several activities are ongoing to pool the resources of the RMD, the LHDs, and the water well drillers to get back to the basics of understanding coliform, practicing sanitary water well construction, applying proper disinfection, developing and conducting adequate monitoring protocols, and implementing good investigative techniques.

Several activities are ongoing:

- LHD Evaluations:

Due to the success of the “Pilot” NCWS annual program evaluation process as discussed in last year’s report, interactions with LHDs in the field has improved. The positive feedback has lead to mapping out other changes in the programs to promote a consultation review of LHDs all year long. An emphasis was placed on updating program goals, indicators, and outcomes relating to the oversight of the LHDs. Stakeholder meetings will begin in FY 2012 to comment on this improved LHD evaluation strategy. The modification to our way of doing evaluations will: address noncompliance issues proactively instead of addressing them potentially several months to a year later; result in NCWS staff having a smaller geographical area to cover, allowing them to be more readily available for consultations with LHD staff; and allow the NCWS staff to provide more time in the field working directly with LHD staff conducting sanitary surveys, resolving violations, issuing construction permits, overseeing difficult treatment systems, and focusing on those facilities that are in routine noncompliance with both monitoring and MCL violations. Additionally, there will be more emphasis placed on sound water well construction principles, the foundation of drinking water public health protection.

- Training of LHD staff:

The MDEQ, in conjunction with the MEHA, provided LHD training in the field this past year by participating in a water well drilling demonstration at a NCWS in Berrien County. It is the state’s goal to provide more of that type of training regionally throughout the state. The MDEQ also continues to provide an annual hands-on training activity at the MEHA Annual Education Conference by providing a show and tell of various water well components, both approved and unapproved. Staff of the MDEQ also continues to be invited to present at the Michigan Ground Water Association’s annual conference that is attended by LHD personnel. The MDEQ’s water well camera has been used at several Type II water well investigations to investigate turbidity and chronic coliform bacteria problems. This type of in-the-field outreach will continue, along with additional training in troubleshooting chronic coliform bacteria issues.

- Building Partnerships:

Two LHD’s, which oversee 11 counties, have volunteered to participate in the USEPA’s Small Systems Initiative (SSI) For Schools and Daycares. This partnership among the MDEQ,

USEPA, and LHD is to help increase or maintain compliance at these facilities. This is especially important because the population at these facilities tends to be more susceptible to the effects of environmental pollutants. This is an ongoing project. Outreach information and training was developed to help these owner/operators become more informed on their responsibilities and the potential risks to their supplies. This SSI partnership improves communication, working relationships, and understanding, which in turn should reduce the duration of a total coliform-positive event and exposure.

- New Manual:

The RMD has finished drafting the Abandoned Water Well Plugging Manual focusing on methods, materials, equipment, and requirements. Beginning in 1998, the MDEQ conducted abandoned water well management training for water well drillers and LHDs, the agency that requires plugging of existing wells when a replacement water well is drilled. The training emphasized cooperation between the drillers and their LHD. As a result, a total of over 110,000 abandoned water wells have been plugged, and the plugging rate approaches 90 percent at residential replacement water well sites. Use of this new manual will continue to assure plugging is done properly.

In FY 2012, the RMD will continue to work closely with the Michigan Ground Water Association, which represents water well drillers, to find ways to more effectively prevent recurring total coliform-positive events.

5.2 Follow Up on Needs Identified in 2009 and 2010

Areas identified are continuing to be addressed.

5.2.1 Implement New Federal Rules

The RMD program and field staff has continued to host and participate in training on new rules. As mentioned earlier, new rule information was presented at each of the eight Michigan Section, AWWA regional meetings, at each of the four small systems CWS training, at quarterly field staff meetings, and during LHD visits by NCWS staff. Staff of the RMD is finalizing the Stage 2 Disinfectants and Disinfection Byproducts Rule (DDBPR) monitoring plan template to make it shorter and more concise. Additionally, two training sessions have been held to help CWS comply with Stage 2 DDBPR requirements and assist in completing their monitoring plans prior to beginning Stage 2 monitoring. Reminders of new rule changes are included in correspondence with water systems whenever possible.

As mentioned in the *2011 Operator Certification and ERG Annual Report*, RMD staff will continue training in FY 2012 targeting small system and NTNCWS certified operators. Training programs will include modules developed by the MDEQ, also being used by LHDs, and they will develop new training modules to keep certified operators updated with regulatory compliance, roles, responsibilities, and latest trends and technology in operating, maintaining, and managing public water supplies.

5.2.2 Capture Sanitary Survey Data

Detailed sanitary survey data is captured on individual Excel spreadsheets for every groundwater and surface water CWS. To create a tool to enhance decision making, the RMD program staff is continuing to investigate options to capture that data in a queryable format.

Currently, RMD staff track basic survey data, specifically survey date, rating of the eight required elements, and significant deficiency tracking in a central database. The RMD hopes to fully transfer this basic survey tracking to SDWIS/State in the near future.

5.2.3 Implement Newly Revised Nonfederal Provisions of the Administrative Rules

The RMD is continuing to implement nonfederal provisions of the administrative rules that were revised along with the adoption of the new federal rules in 2009. The purposes of these revisions, which were discussed more fully in the 2010 report, are listed below:

- Improve capacity in very small systems.
- Provide oversight to NCWS that treat to improve aesthetics.
- Diversify the type of operator training received and update operator certification rules.
- Enhance planning by expanding the requirements of the general plan, reliability study, and contingency plan.
- Provide a source water protection grant program for surface water systems.
- Enhance technical capacity.

The operator training effort included the development of an operator certification program fee package to supplement funding for the OTCU in order to continue offering certification exams, renewals, and Advisory Board training as in the past. On September 20, 2011, Governor Rick Snyder signed House Bills 447 and 448 into law. These bills contain the specific details of the program fee package and the collection of fees for the services offered by the OTCU.

5.2.4 Encourage Asset Management

As the infrastructure funding gap continues, field staff is stressing asset management concepts during interactions with CWS and their local decision makers. Good water system operation and management cannot be mandated, though the RMD hopes the enhanced planning provisions of the recently amended administrative rules will foster better water system management. Several staff attended the USEPA hosted Webinar, *Asset Management, Implementation Benefits for State Drinking Water Programs,* to better understand ways to promote asset management to their systems. In April 2011, staff and system operators also attended the Webinar, *Asset Management 101*, hosted by the USEPA.

5.3 Participate in National Workgroups

Program staff in the RMD is involved in national workgroups with other states, USEPA headquarters and regional offices, the Association of State Drinking Water Administrators, and others to improve implementation or affect change to federal regulations and national policy. An

NCWS Program representative has provided ongoing input to those working to revise the Total Coliform Rule. The RMD water treatment specialist is working with other states and the USEPA to develop recommendations for the anticipated long-term revisions to the Lead and Copper Rule. Also, an RMD manager will be serving as a board member of the Association of State Drinking Water Administrators, participating in a National Drinking Water Infrastructure Needs Survey workgroup and with a perchlorate workgroup consisting of USEPA and state representatives assessing the need for a drinking water standard. Participating in national efforts to improve implementation of the drinking water program will assist in improving overall capacity.

6 Review Existing Systems Program Implementation and Address Findings

Sanitary surveys are the primary tool to evaluate capacity and identify needs for specific systems. A long-standing MDEQ policy dictates sanitary survey frequencies for all types of CWS and NCWS. Follow-up on deficiencies in any system has been a long-standing practice and is required of the LHD under contract with the MDEQ. As stated in last year's edition of this report, the RMD was driven by the federal GWR and the requirement to identify and pursue resolution of significant deficiencies to draft two policies. The first policy sets frequencies for sanitary surveys and the second sets criteria to identify significant deficiencies and establishes procedures to resolve them. Both policies became effective in January 2010. There have been seven significant deficiencies identified in FY 2010 and six identified in FY 2011. All CWS have met their deadlines or escalated enforcement is in place with an acceptable compliance schedule to resolve the deficiencies.

Between sanitary surveys, RMD field staff makes routine on-site visits to review the technical, managerial, and sometimes financial aspects of a CWS and to establish channels of communication with the CWS. The knowledge and familiarity gained by both parties as a result of routine visits are keys to maintaining a cooperative relationship in achieving mutual goals. The frequency of these visits has been dictated in policy based on long-standing practice.

Requests for financial assessments continued to remain sluggish this year. Rather than attempt to increase the number of financial assessments, the RMD has begun to follow up with previously assessed water systems informally during routine on-site visits by field staff and more formally by the financial expert that conducted the original assessment. One reassessment is currently being conducted for the Beecher Metropolitan District in Genesee County, and one assessment was completed for the city of Burton, also in Genesee County.

7 Modify Existing Systems Program Strategy

The strategy remained unchanged during the reporting period. The MDEQ is continuing to implement the original strategy of moving from capacity assessment through assistance to development.

8 Summary

Michigan is continuing to implement a program for new systems and a strategy for existing systems as set forth in May and August 2000, respectively. The new systems' program retains the legal authority and the control points established in 2000. A list of new systems in the last three years is included in this report. No new systems have appeared on an FY 2009 SNC or the FY 2010-FY 2011 ETT.

The strategy for existing systems established in 2000 has remained the same though the specific tools and activities used to implement the strategy have been added, removed, or altered as needed. The drinking water program continually identifies systems in need of capacity development primarily through the sanitary survey process. During the reporting period, needs were identified and discussions were held to determine what areas could be enhanced. A review of implementation of various activities of the strategy occurred and changes were made. The strategy was not modified.

Appendix A: List of New Systems

New CWS
FY 2009 through FY 2011

PWSID[1]	CWS Name	FY Active in SDWIS/State[2]	Date Active CWS	SNC[3]	ETT[4]
MI0000088	ALBEE TOWNSHIP	2011	04/11/11		
MI0040416	SUNSET ESTATES GAYLORD	2011	11/01/10		
MI0000322	AUSTIN COMMONS II	2010	12/21/09		
MI0001258	CEDAR CREEK TOWNSHIP	2010	11/06/09		
MI0004778	NORTH MOORE ESTATES	2010	09/20/10		
MI0006693	TULLYMORE CLUBHOUSE AND CAMELOT VILLAGE	2010	07/01/10		
MI0061700	CURRY HOUSE	2010	08/02/10		
MI0002291	FILLMORE TOWNSHIP	2009	10/30/08		
MI0062720	GOLDEN ORCHARDS	2009	08/04/09		

[1] Public Water System Identification Number
[2] Safe Drinking Water Information System/State
[3] CWS indicated by "Yes" are on the FY 2009 SNC list.
[4] CWS indicated by "Yes" are on the FY 2010 or FY 2011 ETT list with a score of 11 or higher.

FY	New CWS	SNC	ETT
2011	2	0	0
2010	5	0	0
2009	2	0	0
Total	**9**	**0**	**0**

New NTNCWS
FY 2009 through FY 2011

PWSID[1]	NTNCWS Name	FY Active in WaterTrack[2]	Date Active NTNCWS	SNC[3]	ETT[4]
MI0120220	CRYSTAL SPRINGS ESTATES	2011	12/14/10		
MI2521607	ULTRA DEX TOOLING SYSTEMS	2011	01/25/11		
MI4120960	RIVERIDGE PACKING - WORTH BUILDING	2011	10/21/10		
MI4120961	CAL PLEX	2011	04/18/11		
MI4720641	STEP BY STEP EARLY LEARNING CENTER	2011	01/07/11		
MI4720642	ALWAYS UNIQUE CHILDCARE	2011	11/29/10		
MI4720643	ASPEN TECHNOLOGIES	2011	03/09/11		
MI4720644	DYNAMIC TECHNOLOGIES LLC	2011	03/16/11		
MI4720647	COLE TAYLOR MORTGAGE – NORTH BLDG	2011	06/06/11		
MI4720648	COLE TAYLOR MORTGAGE - SOUTH BLDG	2011	06/06/11		
MI7020654	CONSUMERS ENERGY TRAILER WELL	2011	08/12/11		
MI8020565	MBG MARKETING	2011	02/03/11		
MI8120604	JELLYBEAN DAYCARE AND PRESCHOOL	2011	12/16/10		
MI0320651	PARIS RIDGE ELEMENTARY SCHOOL	2010	08/23/10		
MI0320654	MICHIGAN FINE HERBS	2010	04/05/10		
MI2521363	DIPLOMAT PHARMACY	2010	04/08/10		
MI2521460	PEYTON'S LEARNING PLACE	2010	04/21/10		
MI3320205	MUNTERS	2010	08/30/10		
MI4120954	RIVERIDGE PACKING - STORAGE	2010	12/03/09		
MI5220200	TEACHING FAMILY HOMES SCHOOL	2010	05/17/10		
MI5420424	BIG RAPIDS TOWNSHIP INDUSTRIAL PARK	2010	03/01/10		
MI7520304	MONSANTO	2010	02/23/10		
MI2120212	HYDE PROPERTIES	2009	08/12/09		
MI2521602	GOODRICH PLAZA	2009	04/24/09		
MI3020302	BIRD LAKE BIBLE SCHOOL	2009	10/21/08		
MI3320202	DART CONTAINER III	2009	09/03/09		
MI3820830	M.D.O.T. SERVICE CENTER	2009	02/10/09		
MI4120946	MEIJER #248 SOLON TWP	2009	04/10/09		
MI4520263	NORTHPORT POINT	2009	10/22/08		
MI4720097	FACE PROPERTIES LLC	2009	10/29/08		
MI4720346	OLD 23 COMMERCE CENTER	2009	02/11/09		
MI4720440	20TH CENTURY BUILDING COMPANY	2009	10/16/08		
MI4720465	20TH CENTURY BUILDING COMPANY	2009	10/17/08		
MI4720636	FOR KID'S SAKE EARLY LEARNING CENTER/ECONO P	2009	09/24/09		
MI4720781	20TH CENTURY BUILDING COMPANY	2009	10/17/08		
MI4720899	DR. MIKA'S MEDICAL OFFICES	2009	10/23/08		

PWSID[1]	NTNCWS Name	FY Active in WaterTrack[2]	Date Active NTNCWS	SNC[3]	ETT[4]
MI5620085	KIDS TIME	2009	01/07/09		
MI6322874	OAKWOOD ELEMENTARY	2009	08/19/09		
MI6520304	WBRC SCHOOLS - KIRTLAND BUILDING	2009	08/26/09		
MI6720166	NESTLE WATERS NORTH AMERICA	2009	04/03/09		
MI6720192	MUSKEGON RIVER YOUTH HOME S.O.	2009	03/03/09		
MI7520302	FRESH SOLUTION FARMS, LLC	2009	10/21/08		

[1] Public Water System Identification Number
[2] WaterTrack is the database of the NCWS, from which SDWIS/Federal is populated.
[3] NTNCWS indicated by "Yes" are on the FY 2009 SNC list.
[4] NTNCWS indicated by "Yes" are on the FY 2010 or FY 2011 ETT list with a score of 11 or higher.

FY	New NTNCWS	SNC FY 2009	ETT FY 2010-2011
2011	13	0	
2010	9	0	
2009	20	0	
Total	**42**	**0**	**0**

Correction from 2010 Report: FIVE CAP INC - NEWAYGO CENTER MI6220251 was mistakenly reported as new in FY 2010. This system has existed since at least 2006 and should not have been reported as new in 2010.

Appendix B: Outline of a Typical Financial Assessment and Financial Action Plan

Financial Assessment

Introduction: Population, location, transportation routes, and community characteristics; description of the water system and major projects or concerns such as expansion, securing loans, and meeting new drinking water standards; and major financial shortfall such as the need for a rate methodology.

Requested Information: Budget, last two years of audited records, water use and water rate ordinances, latest rate ordinance or resolution, recent rate or feasibility study, and contract or service agreements with outside customers.

Submitted Information: List of information provided.

Analysis: Summary or highlights of each of the documents provided by the supply.

On-Site Meeting: Date and attendees; and list of items discussed, such as the financial concerns, the billing method, and major recent projects.

FAP

Goal One: Develop the financial capability to fund present and future needs.

Task 1: Develop a capital improvement projects plan.

Step 1: List anticipated water projects.
Step 2: Estimate the cost of each project to be funded.
Step 3: Project the anticipated date the project is to begin.
Step 4: Calculate the dollar amount necessary to be set aside annually.
Step 5: Establish a line item in the budget for capital improvement expenditures.

Task 2: Develop and implement a rate setting methodology.

Step 1: Identify water system expenses.
Step 2: Identify replacement expenses and fund the replacement account.

Goal Two: Establish the legal and managerial capability to protect the water system.

Task 1: Develop a penalties section in the water ordinance.

Task 2: Adopt the amendment to the ordinance.

Tools Included With FAP

Sample resolution, sample water use and rate ordinance, service agreement checklist, DWRF informational brochure, project plan preparation guide, and securing a DWRF loan fact sheet.